

Swan Canning Estuary Water Quality Monitoring Project

Weekly Water Quality Report

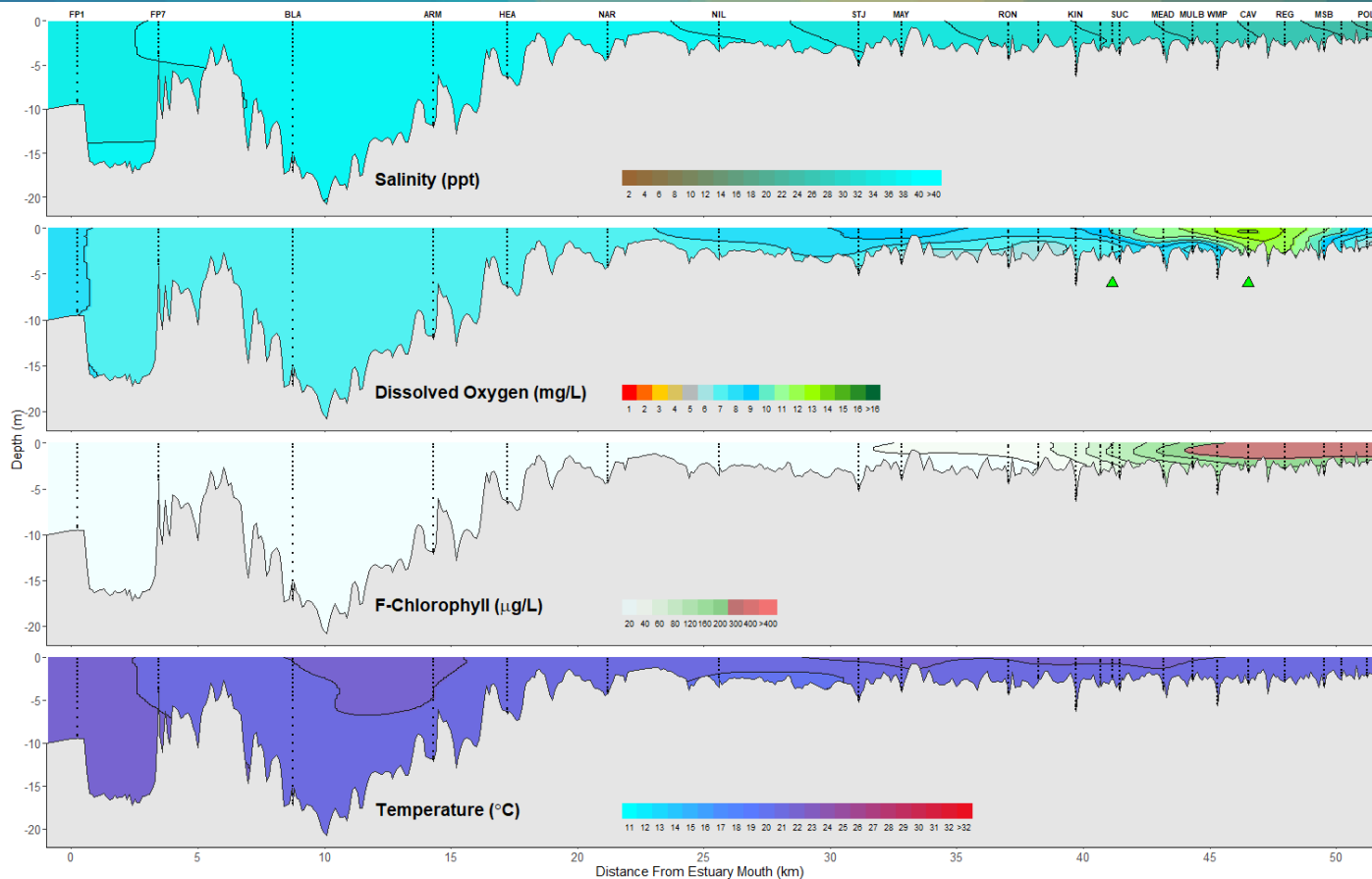
Lower Swan Canning Estuary to Upper Swan Estuary

22 April 2025

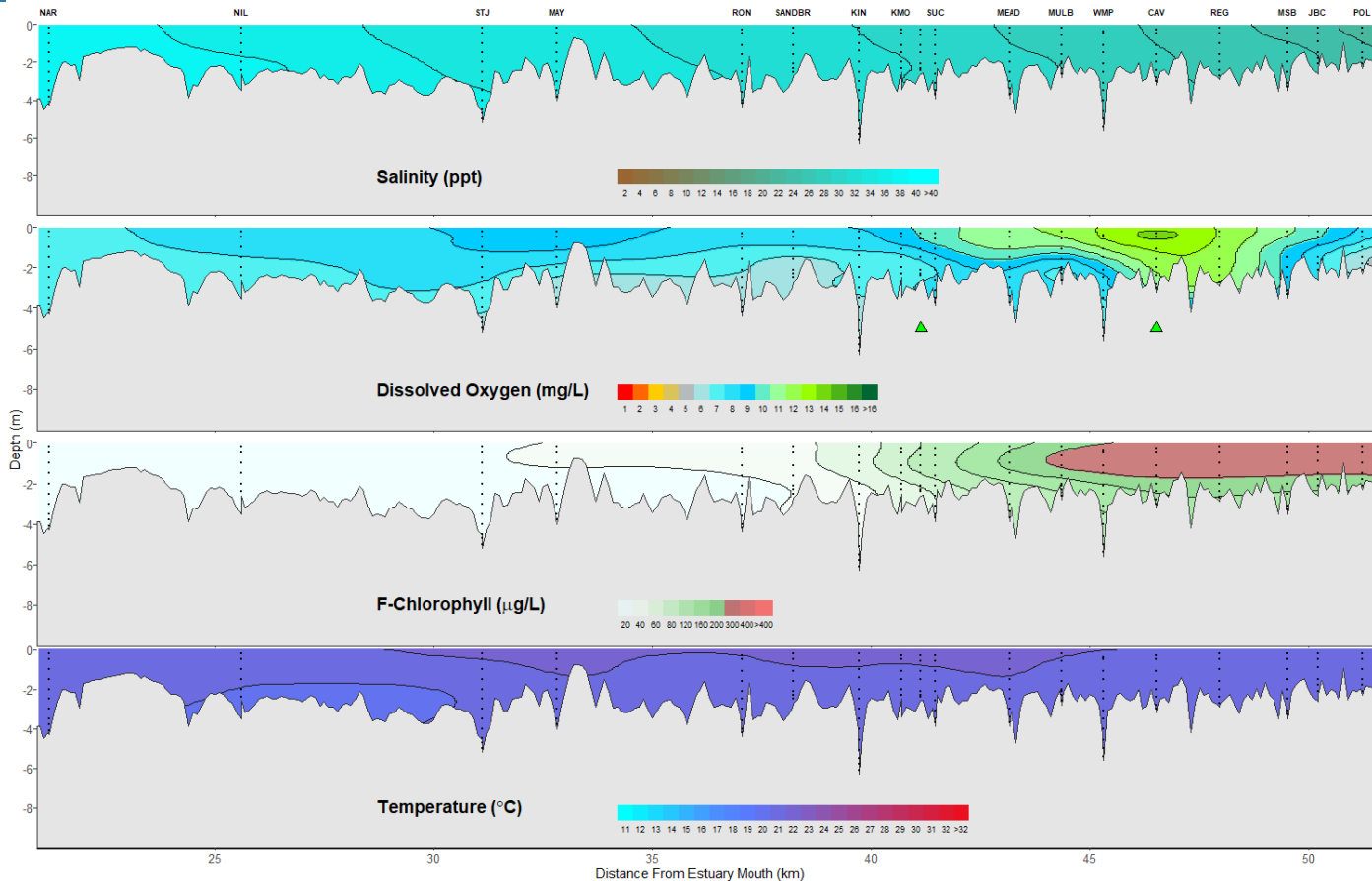
Prepared by

Rivers and Estuaries Science
Biodiversity and Conservation Science
Department of Biodiversity, Conservation and Attractions

Swan Canning Estuary - Water Quality Profiles – 22 April 2025



Swan Canning Estuary - Water Quality Profiles – 22 April 2025



Date: 22 April 2025

Weather & tide conditions: Conditions were partly cloudy with a variable breeze of up to 9.5 knots. The predicted tides at Barrack St were 0.69 m at 3:42 am (low tide) and 1.14 m at 5:52 pm (high tide). Perth recorded no rainfall in the week prior to sampling (Bureau of Meteorology).

Oxygenation: The Guilford and Caversham oxygenation plants were triggered to provide oxygen in the 24 hours prior to sampling.

Lower Swan Canning Estuary (FPI to NAR): The Lower Swan Canning Estuary was saline at FPI and hypersaline from FP7 to NAR. Waters were well oxygenated and chlorophyll fluorescence was low. Water temperatures ranged from 20.2 to 21.2 °C at the time of sampling.

Middle Swan Estuary (NIL to RON): The Middle Swan Estuary was saline over hypersaline at NIL and saline from STJ to RON. Water were oxygenated or well oxygenated and chlorophyll fluorescence was low. Water temperatures ranged from 20.0 to 21.3 °C at the time of sampling.

Upper Swan Estuary (SANDBR to POL): The Upper Swan Estuary was saline from SANDBR to CAV, brackish over saline at REG and brackish from MSB to POL. Waters were oxygenated or well oxygenated. Chlorophyll fluorescence was moderate from SANDBR to JBC, high in surface waters from MEAD to POL and bottom waters from CAV to MSB and at POL and extreme in subsurface waters at JBC. Water temperatures ranged from 20.2 to 21.9 °C at the time of sampling.

NB: Profile plots are visual interpolations of measured parameters only. Detailed data are available at wir.water.wa.gov.au.

Oxygenation Plant Operational Status:

- ▲ Operating for part or all of the 24 hours prior to sampling
- ▲ Operable but not triggered to operate in the 24 hours prior to sampling
- ▲ Inoperable for part or all of the 24 hours prior to sampling

Definitions:

Salinity – fresh <5, brackish 5-25, saline 25-35, hypersaline >36
Dissolved oxygen – well oxygenated >6 mg L⁻¹, oxygenated >4-6 mg L⁻¹, low oxygen >2-4 mg L⁻¹, hypoxic 0.5-2 mg L⁻¹, anoxic <0.5 mg L⁻¹
Chlorophyll fluorescence (low flow): low < 50 µg L⁻¹, moderate 50-150 µg L⁻¹, high 150-400 µg L⁻¹, extreme > 400 µg L⁻¹

Recommended reference: Department of Biodiversity, Conservation and Attractions, 2025. *Swan Canning Estuary water quality profile report, Lower Swan Canning Estuary to Upper Swan Estuary 22 April 2025*. Rivers and Estuaries Science (<https://www.dpaw.wa.gov.au/management/swan-canning-riverpark>)